LABRepCo
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Owner's Guide

ULT FREEZERS Model: LABHP-17-ULTA, LABHP-17-ULTD, LABHP-21-ULTA, LABHP-21-ULTD, LABHP-25-ULTD

OWNER'S INSTRUCTIONS

This manual describes how to operate and care for your appliance to get the best, most efficient, performance.

READ THIS BOOK!

Note to Customer: This merchandise was carefully packed and thoroughly inspected before leaving our plant. Responsibility for its safe delivery was assumed by the carrier upon acceptance of the shipment. As directed on the side of your packing carton, claims for loss or damage sustained in transit must be made on the carrier as follows:

A.) **Visible Loss, Damage, Shortage External Evidence of Loss or Damage:** This type of damage **must** be noted on the freight bill and acknowledged by the carrier's agent (driver) at time of delivery. Make sure you get a signed copy. Send a written request for an inspection to the carrier.

B.) **Concealed Damage**: This type of damage may not be discovered until the unit is being unpacked. When concealed damage is discovered, stop unpacking immediately and contact the carrier immediately to report the claim and request an inspection. This should be done as soon as possible and, in any case, must be done within 15 days or receiving the merchandise. If at all possible, do not move the item and save all packaging material for carrier's inspection.

C.) FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN THE CARRIER REFUSING TO HONOR YOUR COMPANY'S CLAIM. UNDER NO CIRCUMSTANCES SHOULD THE MERCHANDISE BE RETURNED TO THE MANUFACTURER. NO RETURNS WILL BE ACCEPTED WITHOUT PRIOR AUTHORIZATION.

Horizon Scientific
125 Varnfield Drive
Summerville, SC 29483
Phone: 800-648-4041
Fax: 843-821-8051

Warranty:
Two-Year Parts and Labor;
3 Years Compressor Parts

Revision Date
01/16/2015

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Installation and start –up

NOTICE!

READ THIS MANUAL

It is necessary to read and understand this instruction manual because failure to do so may result in (1) substandard performance of your freezer, (2) damage to your freezer and stored items, and also (3) possible injury to operating personnel.

Placement clearance. The freezer must have a clearance of 5" in the rear and 6" on each side so that sufficient air circulation is maintained for the removal of exchange heat.

Start –up. Plug the ULT into power and engage the power switch/breaker located above the power cord. The freezer will start, and the control panel will illuminate in the *default status* with the words SYSTEM NORMAL in *the message line*, which is the top line of the control display.

The other lines will display available operating modes. You will note a pointer (>) on the third line.

The third line is always *the active line*, which means that you will enter that mode or menu by pressing ENTER.

The default status:

Temperature Set Point (SP)	-80°C
High temp alarm	SP+10°C
Low temp alarm	SP-10°C
Password security	OFF
Access code	1234

Power. The ULT requires a dedicated power outlet and circuit breaker: 20-amp circuit for 115V mocels and 15-amp circuit for 230V models.

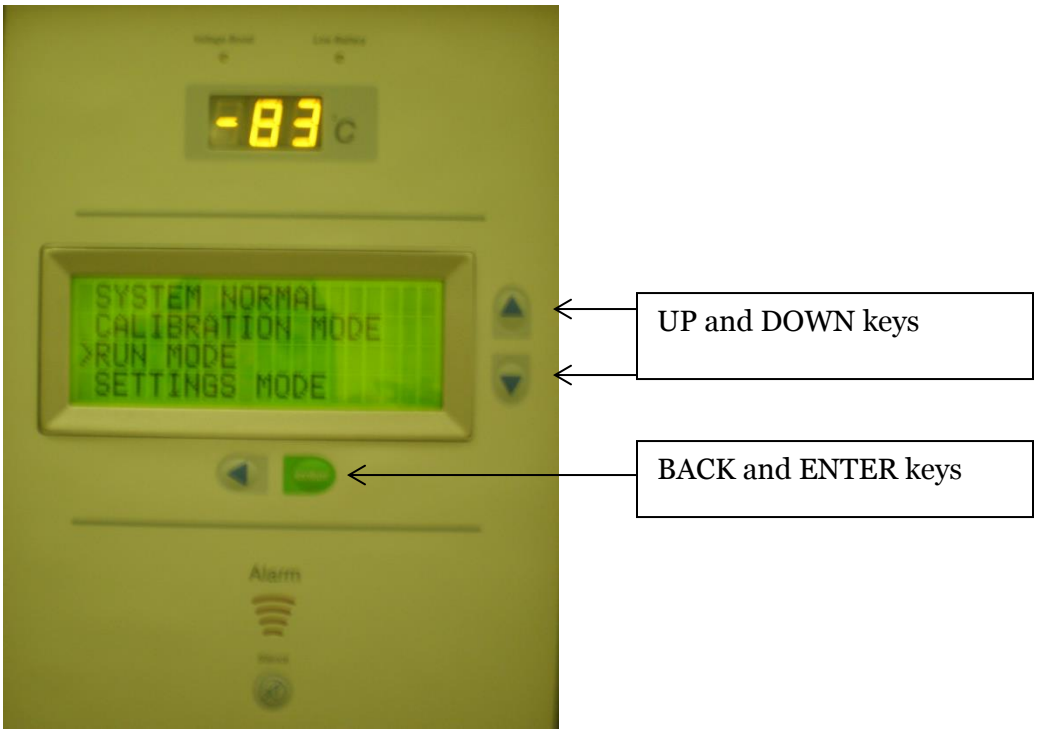
Control overview

The SYSTEM NORMAL display is a monitoring and access screen from which you may enter any of the 4 control modes:

CONFIGURE
CALIBRATE
RUN
SETTINGS

The default setting will be sufficient for many hours while your freezer cools. You may familiarize yourself with the control by setting the time, the date, and perhaps setting an access code (numerical password).

Keys. The ENTER key serves to (1)accept menu selections and value changes and (2) advance the active value through a row of values. The BACK key permits you to scroll back through the values or menu.



The UP and DOWN keys permit you to make numeric steps in settings and selections in the menu

Warning lights are provided for *Voltage boost* (which means you should speak to your maintenance department about low line voltage).

The *Low battery* warning light indicates that you need to replace the battery, the procedure for which is explained in the chapter on *Maintenance*.

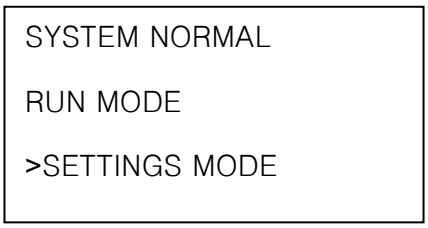
Alarms. Your freezer is protected with 21 alarm monitors. In the event of an alarm, an ALARM MESSAGE will appear *in the message line* at the top of the screen and an alarm will sound. Consult your owner's manual. Consult the chapter on *Alarms* in this manual

Control operation

Setting the time and date.

1. Using the DOWN key, scroll to SETTINGS and press ENTER.

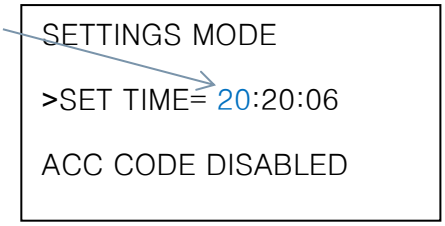
2. Scroll to SET TIME and press ENTER

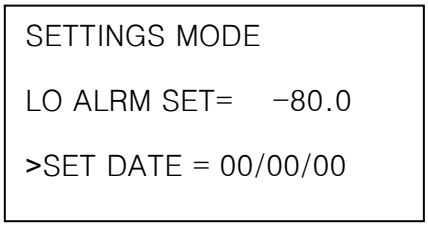


3. The active value in the date display (hours) will blink on and off.

Set the value using the UP and DOWN keys, and Press ENTER to set the value (hour), and move to the next value (minutes).

Set minutes using UP and DOWN keys, press ENTER to save. The active value will automatically scroll to the next settable value, which is SET DATE.





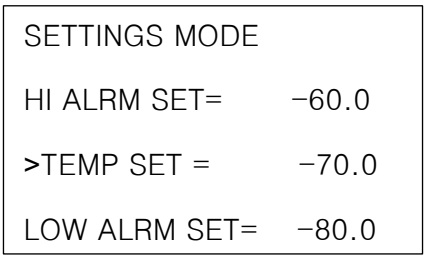
4. Follow the same process to set the date.

Pressing BACK at any time will cancel the entered values.

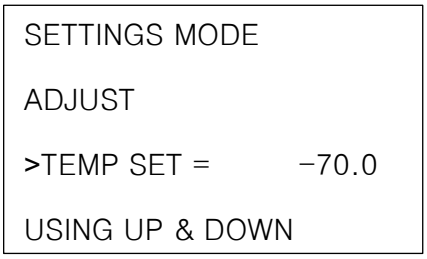
Changing the Temperature settings.

1.Navigate to the SETTINGS mode, and press ENTER to access the SETTINGS mode menu.

2.Use the UP and DOWN keys to scroll to the TEMP SET line, then press ENTER.



3. Use the UP and DOWN keys to set the temperature to the desired value, then press ENTER



Changing Alarm Settings.

1.The high (HI) and low (LO) alarm settings are set in the same way as the TEMP SET described above. Note that the alarms cannot be set any closer to the temperature set point than 10 degrees.

The alarms that may be set by the user are
HIGH TEMP ALARM
LOW TEMP ALARM

SETTINGS MODE

ACC CODE DISABLED

>HI ALRM SET= −60.0

TEMP SET= −70.0

Setting security access code (optional)

When delivered, the freezer has the password security value in the OFF setting. This means that access to modes and settings other than RUN, can be addressed.

If you want to restrict access to all menus *other than* the RUN menu, which is a read-only menu, then you may activate the password security (PASSWRD SECURITY) by switching it to the ON setting. This setting resides in the CONFIGURE menu.

Once you activate password security, you will automatically acquire the factory default password, which is a four-digit numerical code.

Default access code: 1 2 3 4

You may change the code itself by addressing the SETTINGS menu.

Please note the two menus on the right, and remember that the choice of whether or not a code is needed is made in the CONFIGURE menu; but the code itself is edited in the SETTINGS menu.

CONFIGURE MENU:

Ring−back delay
Password security
(*status message*)
LCD contrast
Run battery test
Battery back up

SETTINGS MENU:

Set time
Set date
Access code)
High alarm
Temperature set
Low alarm

Setting security access ON of OFF

1.Navigate to the CONFIGURE mode on the SYSTEM level menu, then press ENTER.

This will take you to the CONFIGURE menu.

SYSTEM NORMAL

>CONFIGURE MODE

CALIBRATION MODE

Scroll down to PASSWRD SECURITY OFF (the current status).

2. Use the UP and DOWN keys to change from
PASSWRD SECURITY OFF to
PASSWRD SECURITY ON,
And press ENTER.

You have now activated password protection
3. Press BACK to return to the system level menu.

CONFIGURE MODE
ADJUST
> PASSWRD SECURITY ON
USING UP & DOWN

Once you have activated PASSWRD SECURITY ON, the following window will appear when an operator requests access to any menu except the RUN menu:

SECURITY ACCESS REQD
ENTER ACC CODE
ACC CODE= 0 0 0 0
PRESS ENTER FOR NEXT

Changing the password.

The password (access code) is only required when the security setting is ON.

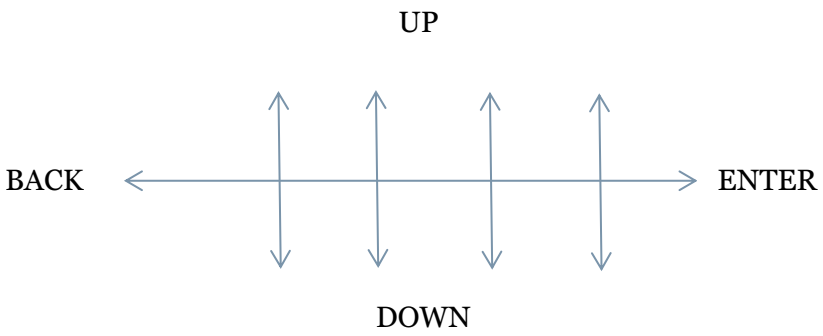
1. Navigate to the SETTINGS mode line, and press ENTER

2 Scroll to the SET ACC CODE, and press ENTER

3. Set the access code by using the UP and DOWN keys to change the value of each digit, and using the ENTER key to move to the next value. You may also use the BACK key to move back through the digits.

SYSTEM NORMAL
RUN MODE
>SETTINGS MODE

SETTINGS MODE
SET TIME= 00:00:00
>ACC CODE= 1 2 3 4
HI ALRM SET= −40

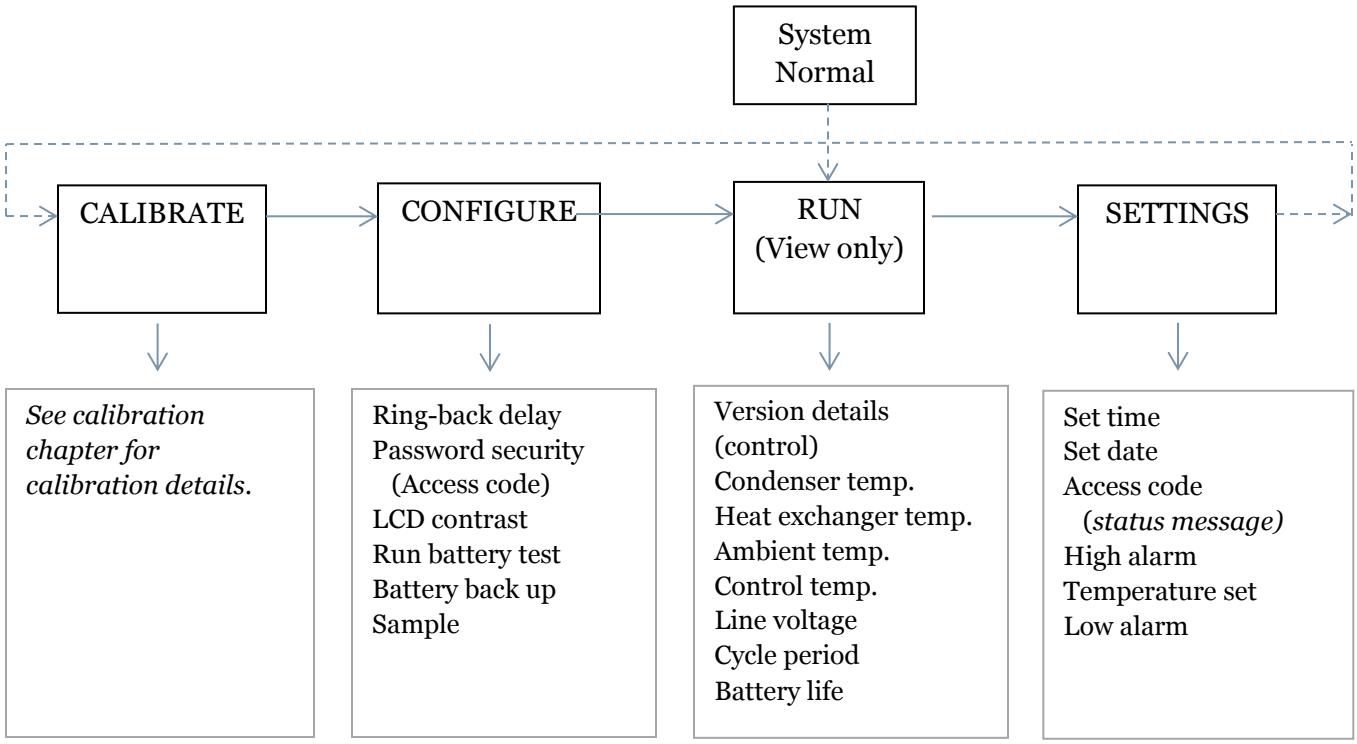


SETTINGS MODE
ADJUST
>ACC CODE= 1 2 3 4
USING UP & DOWN

Control menus

Note that the RUN mode provides a "view only" menu in which you can verify settings. This is the normal mode of operation for the freezer. To make changes in the settings themselves, you must move to one of the other operation modes, CALIBRATE, CONFIGURE, or SETTINGS.

Operating modes and mode menus



Alarms

A series of alarms monitor the various operating conditions of the freezer. These alarms are presented differently depending on the severity of the alarm condition.

The table below lists these alarms and also shows the method of notification. The "Message" column shows what message will be displayed in the message center. The "Audible" column shows if the audible device is activated. The "Ring Back" column indicates if the audible alarm is repeated after a specific time frame. The ring back delay is user selectable in the

Configuration mode. The "Relay" column shows whether each alarm is of sufficient priority to warrant activating the remote alarm contacts.

Note that the remote alarm contacts will always have a 30 minute delay to activate to allow time for on-site personnel to react to and resolve the alarm condition.

Upon the occurrence of any alarm, the top line of the message center display will list the alarm message as shown in the list. In the case of multiple alarm conditions, the display will show each alarm message on the top line in a repeating sequence on three second intervals. The alarms will appear on the message center ONLY when in RUN mode. If the operator changes to a different mode, the alarm LED and the audible alarm will remain active, but the message center top line will display whatever the normal message would be in that mode.

Description	Message	Audible	Ring Back	Relay
High control probe temperature	HIGH TEMP ALARM	yes	yes	yes
Low control probe temperature	LOW TEMP ALARM	yes	yes	yes
Door is open	DOOR OPEN	Yes if > 1 min.	yes	yes
Power failure – loss of AC input voltage	AC LINE FAILURE	yes	no	yes
Power failure – loss of 12V power supply	12V PS FAILURE	yes	no	yes
Wrong power connected	WRONG POWER	yes	yes	yes
High Ambient Temperature	HIGH AMBIENT TEMP	no	n/a	no
Low battery voltage	LOW BATTERY	yes	yes	no
High stage system failure	H S SYSTEM FAILURE	yes	yes	yes
Low stage system failure	L S SYSTEM FAILURE	yes	yes	yes
Air flow alarm (determined from temp probes)	AIR FLOW PROBLEM	yes	yes	no
Low voltage alarm	LOW LINE VOLTAGE	yes	yes	yes
High voltage alarm	HIGH LINE VOLTAGE	yes	yes	yes
Control Probe failure	CONT PROBE FAILURE	yes	yes	yes
Heat exchanger probe failure	HS HX PROBE FAILURE	yes	yes	no

Condenser probe failure	COND PROBE FAILURE	yes	yes	no
Ambient probe failure	AMB PROBE FAILURE	yes	yes	no
Sample probe failure (if installed)	SAMP PROBE FAILURE	yes	yes	no
Control Probe Unplugged	CONT PROBE UNPLUGD	yes	yes	yes
Heat Exchanger Probe Unplugged	HTEX PROBE UNPLUGD	yes	yes	yes
Condenser Probe Unplugged	COND PROBE UNPLUGD	yes	yes	yes
Ambient Probe Unplugged	AMB PROBE UNPLUGD	yes	yes	yes
Sample Probe Unplugged (if installed)	SAMP PROBE UNPLUGD	yes	yes	yes
Failed Battery Test	FAILED BATTERY TEST	yes	yes	no

Alarm Criteria

HIGH TEMP ALARM – Activates when the control probe temperature is at or above the high temp alarm level as stored in memory for more than 1 minute. (Not Cold Enough)

LOW TEMP ALARM - Activates when the control probe temperature is at or below the low temp alarm level as stored in memory for more than 1 minute. (Too Cold)

DOOR OPEN – Activates when the door is sensed open for more than 1 minute. Note that the door sensor is an input to the main control board and its status is to be part of the regular communication from the main control board to the display board.

AC LINE FAILURE – Activates when the input line voltage falls below 80 VAC for 115 V unit or 160 VAC for 230 V unit for more than 10 seconds. This alarm will override and cancel the “LOW LINE VOLTAGE” alarm, so that both alarms are not active at the same time.

12V PS FAILURE – Activates when the input 12V falls below 10.5 VDC for more than 2 seconds and the input line voltage does not fail.

WRONG POWER – Activates when the unit senses that input line voltage is above 150 VAC for a 115 V unit or below 160 VAC for a 230 V unit. There is a jumper located on the main control board that will indicate whether the unit is wired for 115V or 230V operation.

HIGH AMBIENT TEMP – Activates when the ambient temp probe reading is above 36 C.

LOW BATTERY – Activates when the results of a battery test returns a reading of less than 11.0 VDC.

H S SYSTEM FAILURE – Activates when the high stage heat exchanger probe is unable to reach at least -33 C after running the high stage compressor for 30 minutes.

L S SYSTEM FAILURE – Activates when the high stage heat exchanger probe reaches a reading of -50 C or below.

AIR FLOW PROBLEM – Activates when a calculation shows that the difference between the ambient temperature and the condenser temperature probes is greater than 10 C.

LOW LINE VOLTAGE – Activates when the incoming AC power voltage is below 90 VAC on a 115 V unit or 180 VAC on a 230 V unit for more than 1 minute.

HIGH LINE VOLTAGE – Activates when the incoming AC power voltage is above 135 VAC on a 115 V unit or 265 VAC on a 230 V unit for more than 1 minute.

PROBE FAILURE (Control, Heat Exchanger, Condenser, Ambient, Sample) – Activates when either of the following conditions is detected on this probe: A resistance value over 250 ohms, indicating an open sensor, or a reading below 20 ohms, indicating a shorted sensor. The same criteria will apply to the remaining probe failure alarms.

PROBE UNPLUGGED (Control, Heat Exchanger, Condenser, Ambient, Sample) – Each probe has a two-pin logic control as part of its connector, which will be used to detect that the sensor is properly connected. This alarm shows that the system detected this probe is not connected. This same description applies to all probes.

FAILED BATTERY TEST – Activates when the result of a battery test returns a reading of bad battery.

INITIALIZING

If the display board is unable to initialize properly, the message center will not display any valid information. This will serve as the indication of a display board initialization problem. If the main board fails to initialize properly, it will not be able to communicate with the display board and the display board will report a communication problem, as described elsewhere.

Door Open

A door open message is displayed in the message center whenever the door is opened. If the door remains open for more than 1 minute, an audible alarm will sound, subject to normal silence and ring back functions. If the door remains open continuously for 30 minutes, the remote alarm contacts will activate.

Sensor Errors

In addition to any alarms, the control will take the following action if it detects any of the unit's sensors as being in error

Alarm	**Result**
Control Probe failure	Both compressors will turn on and remain on.
Heat exchanger probe failure	Compressor control during pull down will revert to timed staging
Condenser probe failure	Alarm only, no change in compressor control
Ambient probe failure	Alarm only, no change in compressor control
Sample probe failure	Alarm only, no change in compressor control
Line/boost voltage sensing	Unit will operate normally, with boost voltage circuit Off

AC Line Failure Alarm

If AC power input to the freezer has failed, hardware on the main control board will immediately cause a changeover to battery power. Both compressors will be turned off.

Upon resumption of AC power, the compressors will be sequenced using the normal start up method, and the battery charging process will be started.

12 V PS Failure Alarm

If AC power input to the freezer has NOT failed, but the 12V AD/DC Power supply has failed, hardware on the main control board will immediately cause a changeover to battery power. Both compressors will still be controlled as normal, until the battery reaches the "Monitor Only" threshold. At this point both compressors will be turned off.

Upon resumption of AC power, the compressors will be sequenced using the normal start up method, and the battery charging process will be started.

Contacts and communications

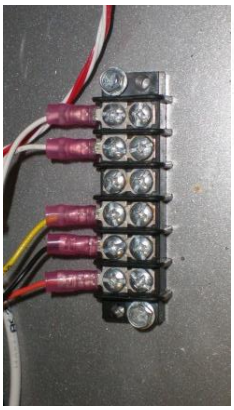
ONLY Authorized, trained electricians should attempt any connection behind the service panels!

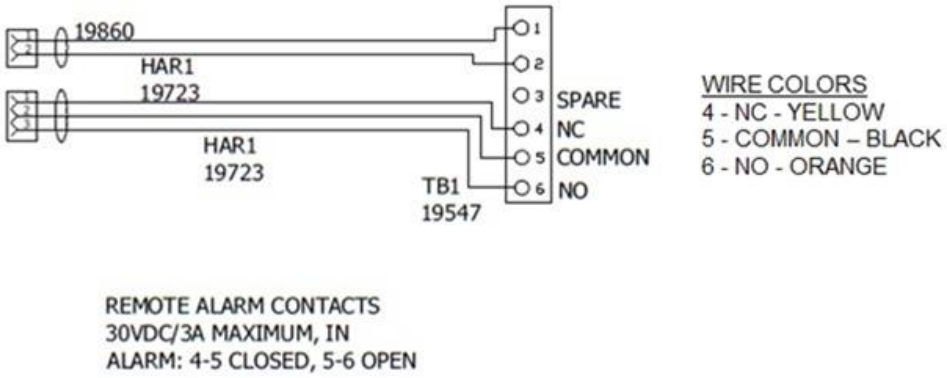
Remote alarm contacts

The Remote Alarm provides a NO (normally open) output, a NC (normally closed) output, and a Common. The Schematic below represents the alarm state and wire colors.

Note:

1) The Remote Alarm contacts will have a 30 minute delay once they are tripped.
2) Always double check the continuity of the NO and NC contacts.
3) This procedure is for the Alarm only. There is no analog output of the freezer temperatures.





A 4-20mA signal is available.

RS-232 Communication is available at the main control box and is meant to be accessed by trained service personnel only.

Maintenance intervals

Maintenance item	Recommended interval
Air cleaner and Condenser	3 months
Calibration	1 year
Battery	1 year
Door gasket and vacuum relief port	Monthly minimum
Defrost	As needed

Maintenance procedures

Air filter

In most laboratory conditions, the air filter should be inspected monthly and cleaned once every three months. Press the top of the filter cover to release the catch. The door will swing forward allowing easy access to the washable prefilter.

Condenser

Anytime that the air filter is removed for cleaning, the condenser fins and coils should be inspected for dust that impedes the flow of air over the coils. Such dust should be removed with a vacuum cleaner. The fins on the heat exchanger are very delicate and are easily bent , so be sure to avoid placing any pressure or impact on the fins while cleaning.

Annual calibration

The control temperature probe should be calibrated once a year. This procedure is described in the *Maintenance Procedures* chapter under *Calibration*.

Battery replacement

Warning! Only authorized, trained electricians should attempt any access behind the service panels!

The battery is located in the lower left-hand (handle side) corner of the compressor compartment. It may be accessed by either removing the front or left-side cover panel. The

battery is secured with two carriage bolts, but it is only necessary to loosen one bolt to remove the battery.

Be sure to disconnect the leads from the control box before removing the battery.

Door gasket and vacuum relief port

Any time that dirt or frost accumulation prevents the door from closing properly, the gasket should be cleaned with a soft cloth. As a general rule, a minimum of once a month is recommended.

When the door gasket is operating as designed, the only means of pressure equalization for the chamber is the vacuum relief port behind the control panel. The vacuum relief port is equipped with a built-in heater to reduce frost accumulation, but some frost can accumulate behind the port on the freezer door. It is important to make a visual check for such accumulation whenever the door is opened and remove any accumulation found.

Defrost

1. Switch off the unit breaker switch and disconnect the freezer from power.

   DISCONNECT battery to avoid deep discharge. To disable the battery, scroll to the CONFIGURE MODE and press ENTER. Scroll to BATTERY BACK-UP ON, and press ENTER

   Use the UP and Down keys to change to OFF, then press ENTER. Upon restart, this configuration will automatically revert to the ON setting

2. Empty the freezer of contents and transfer them to another freezer. Leave the inner doors open.
3. Place moisture absorbing material such as paper or cotton towels in the bottom of the freezer and on the floor in front of the freezer.
4. Allow frost to melt and loosen. The lose frost can be removed carefully in order to move the process along more rapidly.
5. Once the freezer is free of frost, use a mild non-chloride cleaning agent, rinsing with water.
6. Close doors and restore power.
7. Depending upon your temperature set point, storage temperature should be fully restored in 8 to 12 hours.

Calibration

This procedure allows the temperature readout on the control panel to be adjusted to match your temperature standard. The calibration allows for an adjustment to “offset” only. There is no adjustment for “slope” or “span” available through the control panel.

1. Install reference temperature probe next to the control probe located on the interior of the freezer. The reference probe should be calibrated and traceable to a known standard such as NIST. The reference probe has to be installed through the access panel on the rear of the unit. This is best accomplished when the freezer is at room temperature.

2. Turn the freezer on and allow the unit to pull down and cycle at the desired setpoint, or use the default setpoint of -80 C.

3. Navigate to the calibration mode through the control panel, and access the calibration menu. Scroll through the menu until “Control Probe” is reached. Press Enter to access the menu for control probe calibration.

4. Using the Up/Down Arrows, adjust the temperature displayed next to “Control Probe” to match the temperature readout from the reference temperature probe. The temperature is displayed in tenths of a degree. Then Press Enter to accept the calibration for the control probe. Note1: The large temperature display may change value when you press Enter, depending on how much calibration is required.

Note2: The maximum calibration on the temperature probes is +/- 5 C. If further calibration is required, contact the technical service department for assistance.

Options

Sample probe.

There is access to a probe port at the rear of the freezer. It is uncovered when the access plate, held in place with 6 Phillips head screws, is removed.

Chart recorder.

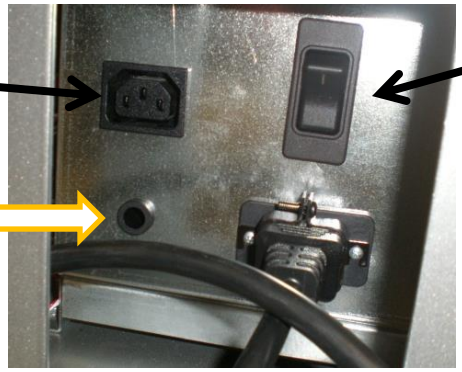
The 7-day chart recorder is added at the factory. See manufacturer’s owner’s manual.

Service and troubleshooting

Chart recorder fuse

The system fuse is located to the left of the power switch.

115V power supply for optional chart recorder and its associated fuse



Power switch

Troubleshooting

For information in addition to that listed in this manual, please call the manufacturer and request help. There is an additional technical troubleshooting guide available for qualified serving personnel.

Diagnostic mode

ONLY Authorized, trained technicians should access the Diagnostic mode!

This mode provides the service technician access to detailed information for the purpose of *evaluating the operation of the freezer and troubleshooting problems*. This mode is accessible only by means of a special set of key presses. The information available in this mode will be displayed on the message center as follows.

Control probe temperature
Ambient probe temperature
Heat exchanger probe temperature
Condenser probe temperature
Sample probe temperature (if installed)
Control probe temperature (default in line 3 position)

Sensed line voltage
Sensed compensated voltage

The menu has the ability to scroll in reverse chronological order through all logged events. The display in this mode will consist only of the date/time stamp and the event message, and will not include the sensor readings as described as output through the RS232 port.

To enter DIAGNOSTICS MODE:

While in RUN mode, press the BACK and SILENCE keys simultaneously. The display will change to:

ENTER DIAG MODE?
CALIBRATION MODE
>RUN MODE
SETTINGS MODE

After this display is showing, the operator then must press the BACK and DOWN keys simultaneously. The display will then change to:

ENTER DIAG MODE?
PRESS ENTER TO
START - BACK TO
CANCEL OR ABORT

If the user then presses the ENTER key, the unit will change to DIAGNOSTIC mode:

DIAGNOSTIC MODE

SAMPLE TEMP = -79.0

CONTROL TEMP = -80.0

LINE VOLTAGE = 120

Note that the active line designator ">" does not appear in diagnostic mode, except for the "DUMP EVENT LOG", "CLEAR EVENT LOG", and "DISPLAY EVENT LOG" lines, as described below.

Scrolling the up and down keys will cause the display to move through the various diagnostic parameters listed above, similar to other modes. When the user reaches the DUMP EVENT LOG line, the display will appear as follows:

DIAGNOSTIC MODE

COMP VOLTAGE = 122

>DUMP EVENT LOG
CLEAR EVENT LOG

If the user presses enter at this point, the display will change to:

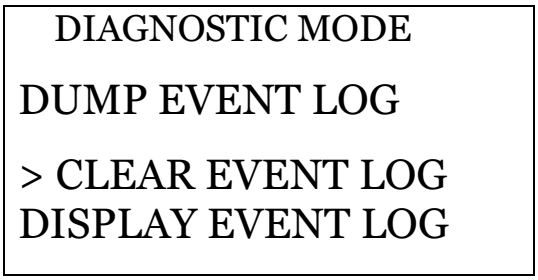
DIAGNOSTIC MODE

PRESS ENTER TO

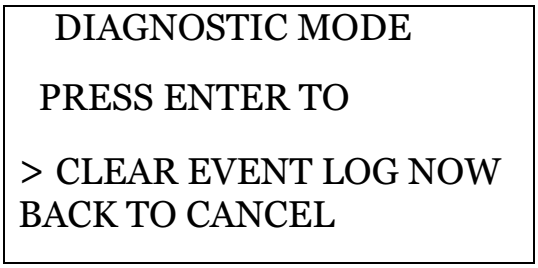
> SEND COMMAND NOW
BACK TO CANCEL

Pressing Enter at this point will result in the entire contents of the Event Log being output to the RS-232 port. The display will then revert to the previous display. Pressing Back will only cause a return to the previous display.

In Diagnostics Mode, Scrolling to the Clear Events log will cause the display to appear as follows:

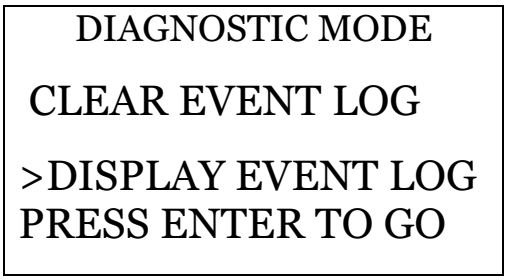


Pressing Enter will cause the display to change to:



Pressing Enter will cause the entire Event Log to be cleared. The display will then revert to the previous display. Pressing Back will only cause a return to the previous display.

In Diagnostics Mode, when the user reaches the DISPLAY EVENT LOG line, the display will appear as follows:



If the user presses enter at this point, the display will begin showing event logs in reverse chronological order, formatted as shown below:

EVENT LOG
yyyymmddhhmmss
[event message line 1]
[event message line 2]

Specifications

Model Number	1768	2168	2568
Temperature Range	-50C to -86C		
Inventory capacity	20 racks	25 racks	30 racks
Box capacity (2”/3”)	320 / 240	400 / 300	480 / 360
Dimensions exterior (HWD) inches	78.25 x 34.38 x 34.75	78.25 x40.1 x34.75	78.25 x 45.75 x 34.75
Dimensions interior (HWD) inches	49.88 x 23.38 x 22.8	49.88 x 29.1 x 22.8	49.88 x 34.75 x 22.8
Required area	12.85 ft_2	14.38 ft_2	15.94 ft_2
Inner doors	5 insulated		
Security	Key lockable door. Passcode protectable control		
Refrigeration CFC free	½ HP x 1/2 HP cascade		
Insulation	5.5” to 6” FIP urethane		
Door gasket	3-point sealing		
BTU rejection	2150	2370	2580
Shipping weight	595	625	675
Performance			
Average stability	2°C		
Average uniformity	±4.5°C		
Average uniformity	±4.5°C		
Reserve capacity	300 Btu/h @ 25°		
Warm-up time	-80 to -50 in 5 hours. -80° to 0 in 12 hours.		
Sound pressure level	55 to 65 db A scale @ 5 feet, depending on location and testing		
Average energy consumption	15 kW Hour/day	16.5 kW Hour/day	18 kW Hour/day

Electrical	115V 60Hz	230V 60Hz
Breaker requirement	20 amps dedicated	15 amps dedicated
Plug	NEMA 5-20	NEMA 6-15
Agency listing	UL 471	

Statement of Warranty

HORIZON SCIENTIFIC, INC. PRODUCT WARRANTY

Horizon Scientific, Inc. warrants to the original purchaser every new Horizon Scientific, Inc. refrigerated unit, the cabinet and all parts thereof, to be free from defects in material or workmanship, when such unit is installed, used, and maintained in accordance with provided instructions, for a period of two (2) years. The warranty period starts two weeks from the date of shipment from Horizon Scientific, Inc. This two week period allows ample shipping time so that the warranty will go into effect at approximately the same time your equipment is delivered. Unless subject to prior written agreement with Horizon Scientific, Inc., this warranty does not allow for any warranty start deferment greater than two weeks from date of shipment due to a delayed installation and/or start-up. By purchasing any product from Horizon Scientific, Inc., you and any entity for which you are purchasing acknowledge and agree to each and every provision contained herein, and all other Notices and Terms provided to Purchaser by Horizon Scientific, Inc., which are hereby incorporated.

Under this warranty, Horizon Scientific, Inc., through its authorized service organizations, will repair, or at its option, replace any part found to contain a manufacturing defect in material or workmanship without charge to the owner for parts, service labor or any shipping or cartage costs. Replacement or repaired parts will be warranted for only the unexpired portion of the original warranty.

ADDITIONAL THREE YEAR COMPRESSOR WARRANTY

In addition to the two (2) year warranty stated above, Horizon Scientific, Inc. warrants its hermetically and semi-hermetically sealed compressors to be free from defects in both material and workmanship under normal use and service for a period of three (3) additional years from the end of the initial two (2) year warranty period, but not to exceed five (5) years after shipment from Horizon Scientific, Inc.

Compressors determined by Horizon Scientific, Inc. to have been defective within this extended time period will, at Horizon Scientific, Inc.′s option, be either repaired or replaced with a compressor or compressor parts of similar design and capacity.

The three (3) year extended compressor warranty applies only to hermetically and semi-hermetically sealed parts of the compressor and does not apply to any other parts or components, including, but not limited to, cabinet, paint finish, temperature control, refrigerant, metering device, driers, motor starting equipment, fan assembly or any other electrical components.

Horizon Scientific, Inc.’s sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than expressly covered by this warranty.

NO CONSEQUENTIAL DAMAGES. Horizon Scientific, Inc. is not responsible for economic loss; profit loss; or special, indirect or consequential damages, including without limitation, losses or damages arising from contents spoilage claims whether or not on account of refrigeration failure, electrical failure, power failure, or compressor failure. HORIZON SCIENTIFIC, INC.’S MAXIMUM CUMULATIVE LIABILITY RELATIVE TO ALL CLAIMS AND LIABILITIES, INCLUDING OBLIGATIONS UNDER ANY INDEMNITY, WHETHER OR NOT

INSURED, SHALL NOT EXCEED THE COST OF THE PRODUCT(S) GIVING RISE TO THE CLAIM OR LIABILITY.

WARRANTY IS NOT TRANSFERABLE. This warranty is not assignable and applies only in favor of the original purchaser/user to whom delivered. Any such assignment or transfer shall void the warranties herein made and shall void all warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose.

NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. There are no other warranties, express, implied, or statutory, except the two (2) year warranty and the additional three (3) year compressor warranty as described above. These warranties are exclusive and in lieu of all other warranties, including implied warranty and merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description on the face hereof, whether based on contract, warranty, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether arising out of warranties, representations, instructions, installations, or non-conformities from any cause. Purchaser further acknowledges that the purchase price of the Product reflects these warranty terms and remedies.

ALTERATION, NEGLECT, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT OR INSTALLATION, FIRE, FLOOD OR OTHER EXTERNAL CAUSES.

Horizon Scientific, Inc. is not responsible for the repair or replacement of any parts that Horizon Scientific, Inc. determines have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood or other external causes. It does not apply to defects resulting from failure to properly install, operate or maintain the product in accordance with the printed instructions provided, or damage caused by the storage of any corrosive material that comes in contact with the interior or exterior portions of the cabinet, or the use of spark producing equipment or containers (such as galvanized or carbonized steel containers) that come in contact with any interior portion of the cabinet.

OUTSIDE U.S./CANADA. This warranty does not apply to, and Horizon Scientific, Inc. is not responsible for, any warranty claims made on products sold or used outside the United States and Canada.

CHOICE OF LAW/VENUE. The laws of the State of South Carolina shall govern the validity, interpretation and enforcement of this warranty, regardless of conflicts of law principles. Purchaser agrees that proper venue for any action to enforce the terms of this warranty shall be the Dorchester County District Courts, South Carolina. Purchaser submits the jurisdiction of such courts over the Purchaser and the subject matter of any such action. Any action for breach of these warranty provisions must be commenced within one (1) year after that cause of action has accrued.

WARRANTY CLAIMS. To obtain prompt warranty service, simply contact the manufacturer at 800-648-4041. Horizon Scientific, Inc.'s shipping records showing date of shipment shall be conclusive in establishing the warranty period. All claims should include: model number of the refrigerator, the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect. Any repairs must be authorized by Horizon in order for the warranty to be honored.

LabRepCo, LLC
101 Witmer Rd., #700
Horsham, PA 19044
Phone: 800-521-0754
Fax: 215-442-9202